AGENDA

UNIFORM BUILDING CODE COMMISSION PLUMBING /HEALTH ADVISORY COMMITTEE MEETING

October 7, 2021 9:00 AM

This agenda is subject to change up to 24 hours prior to the meeting.

Anchor Location

North Conference Room Heber M Wells Building 160 E 300 S Salt Lake City, UT

Join with Google Meet meet.google.com/yyg-prwi-tdz

Join by phone (US) +1 617-675-4444 PIN: 573 997 151 2362#

- 1. Roll call
- 2. Approval of the September 2, 2021 minutes
- 3. Review proposed amendment for IPC Section 604
- 4. Review current amendment for 15A-3-205(10) for Section P2910.5
- 5. Continue with the review of the plumbing portion of the 2021 IRC and current amendments

Next Scheduled Meeting: November 4, 2021

Please call Sharon at 530-6163 or email ssmalley@utah.gov if you do not plan on attending.



In compliance with the Americans with Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) during this meeting should notify Dave Taylor, ADA Coordinator, at least three working days prior to the meeting. Division of Occupational and Professional Licensing, 160 East 300 South, Salt Lake City UT 84115, Phone 530-6628 or toll-free in Utah only 866-275-3675.

UTAH DEPARTMENT OF COMMERCE DIVISION OF OCCUPATIONAL AND PROFESSIONAL LICENSING 160 Fact 300 South Salt Lake City LIT 84111

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E-mail: dansjones@utah.gov Web www.dopl.utah.gov

REQUEST FOR CODE AMENDMENT

Requesting Agency/Person: Jordan Valley Water Conservancy
District

Street Address: 8215 South 1300 West

City, State, Zip: West Jordan, UT 84088

Contact Person: Bart Forsyth, CEO/General Manager

Phone: 801-565-4300

Code to be Amended: 2018 International Plumbing Code
(Include edition)

Section: 604

Section Title: Design of Building Water Distribution System

AMENDMENT:

Type proposed amendment in rule change form. (Using strikeout on portions being removed and underline on all new wording.)

- 1. Include the entire section you wish to amend.
- 2. Attach additional sheets if necessary.

TABLE 604.4

MAXIMUM FLOW RATES AND CONSUMPTION TO PLUMBING FIXTURES AND FIXTURE FITTINGS

PLUMBING FIXTURE OR FIXTURE FITTING	MAXIMUM FLOW RATE OR QUANTITY ^b
Lavatory, private	2.2 <u>1.5</u> gpm at 60 psi
Lavatory, public (metering)	0.25 gallon per metering cycle
Lavatory, public (other than metering)	0.5 gpm at 60 psi
Shower head	2.5 <u>2</u> gpm at 80 psi
Sink faucet	2.2 gpm at 60 psi
Urinal	1.0 0.5 gallon per flushing cycle
Water closet	1.6 1.28 gallons per flushing cycle

Purpose of or Reason for the amendment: Water efficiency standards for indoor fixtures would provide significant water savings for Utah communities, improve drought resiliency, and allow for a more balanced approach to managing the competing demands of water and population growth. The proposed modifications are based on the U.S. Environmental Protection Agency's WaterSense program, which sets requirements for water fixtures to be at least 20 percent more water efficient than existing federal standards while maintaining comparable or better performance.		
Across the Western United States, several states including California, Colorado, Nevada, and Texas have already successfully adopted indoor water efficiency standards. If Utah followed a similar model, state water managers could expect savings of roughly 16,000 acre-feet (5.2 billion gallons) per year by the year 2030.		
Cost or Savings Impact of Amendment: Outside of the water savings, there are no known cost impacts anticipated as a result of adopting this proposed amendment.		
Compliance Costs for Affected Persons (APerson@ means any individual, partnership, corporation, association, governmental entity, or public or private organization of any character other than an agency.) (You must break out the impact cost to State Budget, Local Government and you must state aggregate cost to other persons {cost per person times number of persons affected}):		
WaterSense labeled fixtures are widely available from both local and national suppliers and retailers. Consumers often purchase these water-efficient fixtures without realizing it. As with any product, there are many factors that influence price, however a comparison of similar brands/models shows no real cost difference in fixtures that meet existing federal standards to those that meet the WaterSense standards. It is expected that there will be no significant cost difference to comply with this proposed amendment.		
Signature: Bartan G. Forseth Date: Sept. 21, 2021		
For Division Use:		
Date Received:		
Committee Action: ☐ Approved ☐ Denied ☐ Approved with revisions ☐ Referred to: ☐ Tabled	UBC Commission Decision for Hearing: □ Approved for hearing □ Denied □ Approved with revisions □ Referred to: □ Tabled	
Date Filed:	Public Hearing Date:	
UBC Commission Decision for Adoption: □ Approved □ Denied □ Approved with revisions □ Referred to: □ Tabled	Effective Date:	

MINUTES

UNIFORM BUILDING CODE COMMISSION PLUMBING /HEALTH ADVISORY COMMITTEE MEETING

September 2, 2021 9:00

Meeting

CONVENED: 9:02

ADJOURNED: 10:38

STAFF:

Steve Duncombe, Bureau Manager Sharon Smalley, Secretary

COMMITTEE MEMBERS:

Nathan Lunstad Andrea Gamble (excused) Travis Hales (absent) Jeff Brown (absent) Dean Johnson Linda Ebert Jeremy Haslam Don Simons Rob Allen

VISITORS:

MINUTES

A motion was made by Linda Ebert to approve the minutes from the June 3, 2021 meeting as written. The motion was seconded by Jeremy Haslam and passed unanimously.

ROLL CALL AND WELCOME NEW COMMITTEE MEMBERS The two new members of this committee, Dean Johnson and Rob Allen, introduced themselves and gave a brief background.

CONTINUE WITH THE REVIEW OF THE PLUMBING PORTION OF THE 2021 IRC AND CURRENT AMENDMENTS The committee decided to postpone the review of the current amendments until the October meeting.

REVIEW PROPOSED AMEND-MENTS FOR SECTIONS P2508.2, P2602.1, P2801.6.3, P2804.6.1, 15A-3-205(6), P2902.1.2.1, P3007.3.3.1, AND P3009

The committee reviewed the proposals for the plumbing sections of the 2021 IRC. The following motions were made after each proposal was reviewed.

A motion was made by Rob Allen to accept the proposal for a new amendment for Sections

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P2503.8.1 and P2508.2. The motion was seconded by Linda Ebert and passed unanimously.

It was pointed out that the Section P2509.3 should be P2503.9. No recommendation was made for an amendment to this section.

A motion was made by Dean Johnson to accept the proposal to add a new amendment for Section P2602.1. The motion was seconded by Rob Allen and passed unanimously.

A motion was made by Jeremy Haslam to accept the proposal for a new amendment for Section P2801.6.2. The motion was seconded by Dean Johnson and passed unanimously.

A motion was made by Rob Allen to accept the proposal for a new amendment for Section P2801.6.3. The motion was seconded by Dean Johnson and passed unanimously.

A motion was made by Jeremy Haslam to accept the proposal to modify the current amendment for Section P2801.8. The motion was seconded by Rob Allen and passed unanimously.

A motion was made by Don Simons to accept the proposal to add a new amendment for Section P2804.6.1. The motion was seconded by Rob Allen and passed unanimously.

A motion was made by Don Simons to accept the proposal to modify the current amendment for Section P2902.1.1. The motion was seconded by Dean Johnson and passed unanimously.

A motion was made by Rob Allen to modify the current amendment for 15A-3-205(7) for section P2902.1.2.1. The motion was seconded by Jeremy Haslam and passed unanimously.

The recommendation for this section will be reviewed at the next meeting for a possible amendment to modify the current amendment for 15A-3-205(10).

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Rob Allen left the meeting at this point.

A motion was made by Don Simons to delete the current amendment to 15A-3-205(14). The motion was seconded by Dean Johnson and passed unanimously.

A motion was made by Dean Johnson to modify the current amendment 15A-3-205(16) by changing the section number to P3101.4. The motion was seconded by Don Simons and passed unanimously.

A motion was made by Jeremy Haslam add a new amendment to Section P3007.3.3.1. The motion was seconded by Don Simons and passed unanimously.

A motion was made by Dean Johnson to accept the proposal to add a new amendment for Section P3009. The motion was seconded by Don Simons and passed unanimously.

This committee is asking the Electrical Advisory committee to review Chapter 42.

The meeting adjourned at 10:38.

15A-3-205 Amendments to Chapters 26 through 35 of IRC.

- (1) In IRC, Section P2503.8, the word "devices" is deleted and replaced with the word "assemblies".

 (2) IRC Section P2508.2 is deleted and replaced with the following: "P2508.2 Testing. Reduced pressure principle, double check, pressure vacuum breaker, reduced pressure detector fire protection, double check detector fire protections, and spill-resistant vacuum breaker backflow preventer assemblies shall be tested at the time of installation, immediately after repairs or relocation and at least annually. The Utah Cross-Connection Control Commission has adopted the field test procedures published by the Manual of Cross Connection Control, Tenth Edition. This manual is published by the University of Southern California's Foundation for Cross-Connection Control and Hydraulic Research. Test gauges shall comply with ASSE 1064."
- (3) IRC Section P2602.1 is deleted and replaced with the following: "P2602.1 General. The water-distribution system of any building or premises where plumbing fixtures are installed shall be connected to a public water supply. Where a potable public water supply is not available, individual sources of potable water supply shall be utilized provided that the source has been developed in accordance with Utah Code, Section 73-3-1, 73-3-3, and 73-3-25, as administered by the Department of Natural Resources, Division of Water Rights. In addition, the quality of the water shall be approved by the local health department having jurisdiction. The source shall supply sufficient quantity of water to comply with the requirements of this chapter."

Every building in which plumbing fixtures are installed and all premises having drainage piping shall be connected to a public sewer where the sewer is accessible and is within 300 feet of the property line in accordance with Utah Code, Section 10-8-38; or an approved private sewage disposal system in accordance with Utah Administrative Code, Rule R317-4, as administered by the Department of Environmental Quality, Division of Water Quality.

Exception: Sanitary drainage piping and systems that convey only the discharge from bathtubs, showers, lavatories, clothes washers, and laundry trays shall not be required to connect to a public sewer or to a private sewage disposal system provided that the piping or systems are connected to a system in accordance with Section P2910 or P2911.

- (4)(4)A new IRC, Section P2602.3, is added as follows: "P2602.3 Individual water supply. Where a potable public water supply is not available, individual sources of potable water supply shall be utilized, provided that the source has been developed in accordance with Utah Code, Sections 73-3-1 and 73-3-25, as administered by the Department of Natural Resources, Division of Water Rights. In addition, the quality of the water shall be approved by the local health department having jurisdiction."
- (2)(5)A new IRC, Section P2602.4, is added as follows: "P2602.4 Sewer required. Every building in which plumbing fixtures are installed and all premises having drainage piping shall be connected to a public sewer where the sewer is accessible and is within 300 feet of the property line in accordance with Utah Code, Section 10-8-38; or an approved private sewage disposal system in accordance with Utah Administrative Code, Chapter 4, Rule R317, as administered by the Department of Environmental Quality, Division of Water Quality."
- (3)(6) In IRC, Section P2705, Item 5, the words "lavatory" and "lavatories" are deleted.
- (4)(7)In IRC, Section P2705, a new Item 6 is added as follows: "6. Lavatories. A lavatory shall not be set closer than 12 inches from its center to any side wall or partition. A lavatory shall be provided with a clearance of 24 inches in width and 21 inches in depth in front of the lavatory to any side wall, partition, or obstruction." Remaining item numbers are renumbered accordingly.
- (8) In IRC, Section P2801.6.2, the following is added at the end of the section: When permitted by the code official, the pan drain may be directly connected to a soil stack, waste stack, or branch drain. The pan drain shall be individually trapped and vented as required in Section 907.1. The pan drain shall not be directly or indirectly connected to any vent. The trap shall be provided with a trap primer conforming

to ASSE 1018 or ASSE 1044, a barrier type floor drain trap seal protection device meeting ASSE 1072, or a deep seal p-trap.

(9) A new IRC, Section, P2801.6.3, is added as follows: "P2801.6.3 Pan Designation. A water heater pan shall be considered an emergency receptor designated to receive the discharge of water from the water heater only and shall not receive the discharge from any other fixtures, devises, or equipment.

(5)(10)In IRC, Section P2801.8, all words in the first sentence up to the word "water" are is deleted and replaced with the following: "P2801.8 Water Heater Seismic Bracing. As a minimum requirement, water heaters shall be anchored or strapped to resist horizontal displacement caused by earthquake motion. Strapping shall be at points within the upper one third and lower one-third of the appliance's vertical dimensions."

(11) In IRC, Section P2804.6.1, a new number 15 is added as follows:

15. Be installed in accordance with the manufacturer's installation instructions, not to exceed 180 degrees in directional changes."

(6)(12)A new IRC, Section P2902.1.1, is added as follows: "P2902.1.1 Backflow assembly testing. The premise owner or the premise owner's designee shall have backflow prevention assemblies operation tested in accordance with administrative rules made by the Drinking Water Board at the time of installation, repair, and relocation and at least on an annual basis thereafter, or more frequently as required by the authority having jurisdiction. Testing shall be performed by a Certified Backflow Preventer Assembly Tester. The assemblies that are subject to this paragraph are the Spill Resistant Vacuum Breaker, the Pressure Vacuum Breaker Assembly, the Double Check Backflow Prevention Assembly, the Double Check Detector Assembly Backflow Preventer, the Reduced Pressure Principle Backflow Preventer, and Reduced Pressure Detector Assembly. Third-party certification for backflow prevention assemblies will consist of any combination of two certifications, laboratory or field. Acceptable third-party laboratory certifying agencies are ASSE, IAPMO, and USC-FCCCHR. USCFCCCHR currently provides the only field testing of backflow protection assemblies. Also see www.drinkingwater.utah.gov and rules made by the Drinking Water Board." Reduced pressure principle. double check, pressure vacuum breaker, reduced pressure detector fire protection double check detector fire protection and spill-resistant vacuum breaker backflow preventer assemblies shall be tested at the time of installation, immediately after repairs or relocation and at least annually. The Utah Cross Connection Control Commission has adopted the field test procedures published by the Manual of Cross Connection Control, Tenth Edition. This manual is published by the University of Southern California's Foundation for Cross-Connection Control and Hydraulic Research. Test gauges shall comply with ASSE 1064."

(7)(13)In IRC, Section P2902.1, the following subsections are added as follows:

"P2902.1.1 General Installation Criteria.

Assemblies shall not be installed more than five feet above the floor unless a permanent platform is installed. The assembly owner, where necessary, shall provide devices or structures to facilitate testing, repair, and maintenance, and to insure the safety of the backflow technician.

P2902.1.2 Specific Installation Criteria.

P2902.1.2.1 Reduced Pressure Principle Backflow Prevention Assembly.

The reduced pressure principle backflow prevention assembly shall be installed as follows:

- a. The assembly may not be installed in a pit or below grade where the relief port could be submerged in water or where fumes could be present at the relief port discharge.
- b. The relief valve of the assembly shall not be directly connected to a waste disposal line including a sanitary sewer, a storm drain, or a vent.
- c. The assembly shall be installed in a horizontal position only, unless listed or approved for

vertical installation in accordance with Section 303.4 of the IPC as amended in 15A-3-303(1).

- d. The bottom of the assembly shall be installed a minimum of 12 inches above the floor or ground.
- e. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall be readily accessible for testing, repair, and maintenance. and shall be readily accessible for testing, repair, and maintenance.

P2902.1.2.2 Double Check Valve Backflow Prevention Assembly.

A double check valve backflow prevention assembly shall be installed as follows:

- a. The assembly shall be installed in a horizontal position only, unless listed or approved for vertical installation.
- b. The bottom of the assembly shall be a minimum of 12 inches above the ground or floor.
- C. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall be readily accessible for testing, repair, and maintenance.
- d. If installed in a pit, the assembly shall be installed with a minimum of 12 inches of clearance between all sides of the vault, including the floor and roof or ceiling, with adequate room for testing and maintenance.

P2902.1.2.3 Pressure Vacuum Break Assembly and Spill Resistant Pressure Vacuum Breaker Assembly. A pressure vacuum break assembly or a spill resistant pressure vacuum breaker assembly shall be installed as follows:

- **a.** The assembly shall not be installed in an area that could be subject to backpressure or back drainage conditions.
- b. The assembly shall be installed a minimum of 12 inches above all downstream piping and the highest point of use.
- **c.** The assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall be readily accessible for testing, repair, and maintenance.
- d. The assembly shall not be installed below ground, in a vault, or in a pit.
- e. The assembly shall be installed in a vertical position."

(8)(14)In IRC, Section 2903.5, at the beginning of the second sentence, insert "If installed,".

(9)(15)In IRC, Section P2903.9.3, the first sentence is deleted and replaced with the following: "Unless the plumbing appliance or plumbing fixture has a wall-mount valve, shutoff valves shall be required on each fixture supply pipe to each plumbing appliance and to each plumbing fixture other than bathtubs and showers."

(10)(16)IRC, Section P2910.5, is deleted and replaced with the following:

"P2910.5 Potable water connections.

When a potable water system is connected to a nonpotable water system, the potable water system shall be protected against backflow by a reduced pressure backflow prevention assembly or an air gap installed in accordance with Section 2901."

(11)(17)IRC, Section P2910.9.5, is deleted and replaced with the following:

"P2910.9.5 Makeup water.

Where an uninterrupted nonpotable water supply is required for the intended application, potable or reclaimed water shall be provided as a source of makeup water for the storage tank. The makeup water supply shall be protected against backflow by means of an air gap not less than 4 inches (102 millimeters) above the overflow or by a reduced pressure backflow prevention assembly installed in accordance with Section 2902."

(12)(18)In IRC, Section P2911.12.4, the following words are deleted: "and backwater valves." (13)(19)In IRC, Section P2912.15.6, the following words are deleted: "and backwater valves." (20) In IRC, Section P3007.3.3.1 Materials, the following is added after the word "PE": stainless steel, cast iron, galvanized steel, brass.

(14)(21)IRC, Section P3009, is deleted and replaced with the following: "P3009 Connected to nonpotable water from on site water reuse systems. Nonpotable systems utilized for subsurface irrigation for single-family residences shall comply with the requirements of R317-401, UAC, Graywater Systems." P3009 Graywater Soil Absorption Systems: Graywater recycling systems utilized for subsurface irrigation for single-family residences shall comply with the requirements of UAC R317-401, Graywater Systems. Graywater recycling systems utilized for subsurface irrigation for other occupancies shall comply with UAC R317-3, Design Requirements for Wastewater Collection, Treatment, and Disposal Systems and UAC R317-4, Onsite Wastewater Systems."

(15)(22)In IRC, Section P3103.6P3101.4, the following sentence is added at the end of the paragraph: "Vents extending through the wall shall terminate not less than 12 inches from the wall with an elbow pointing downward."

(16)(23)In IRC, Section P3104.4, the following sentence is added at the end of the paragraph: "Horizontal dry vents below the flood level rim shall be permitted for floor drain and floor sink installations when installed below grade in accordance with Chapter 30, and Sections P3104.2 and P3104.3. A wall cleanout shall be provided in the vertical vent."

Amended by Chapter 20, 2019 General Session

Part 3

Statewide Amendments to International Plumbing Code

15A-3-301 General provision.

The amendments in this part are adopted as amendments to the IPC to be applicable statewide.

Enacted by Chapter 14, 2011 General Session

15A-3-302 Amendments to Chapters 1 and 2 of IPC.

- (1) In IPC, Section 202, the definition for "Backflow Backpressure, Low Head" is deleted.
- (2) In IPC, Section 202, the following definition is added: "<u>Utah</u> Certified Backflow Preventer Assembly Tester. A person who has shown competence to test Backflow prevention assemblies to the satisfaction of the authority having jurisdiction under Utah Code, Subsection 19-4-104(4) and Utah Administrative Code R309-305."
- (3) In IPC, Section 202, the following definition is added: "Contamination (High Hazard). An impairment of the quality of the potable water that creates an actual hazard to the public health through poisoning or through the spread of disease by sewage, industrial fluids or waste."
- (4) In IPC, Section 202, the definition for "Cross Connection" is deleted and replaced with the following: "Cross Connection. Any physical connection or potential connection or arrangement between two otherwise separate piping systems, one of which contains potable water and the other either water of unknown or questionable safety or steam, gas, or chemical, whereby there exists the possibility for flow from one system to the other, with the direction of flow depending on the pressure differential between the two systems (see "Backflow")."
- (5) In IPC, Section 202, the following definition is added: "Deep Seal Trap. A manufactured or field fabricated trap with a liquid seal of 4" or larger."
- (6) In IPC, Section 202, the definition for "Essentially Nontoxic Transfer Fluid" is deleted and replaced with the following:
 - "ESSENTIALLY NONTOXIC TRANSFER FLUID. Fluids having a Gosselin rating of 1, including propylene glycol; and mineral oil."
- (7) In IPC, Section 202, the definition for "Essentially Toxic Transfer Fluid" is deleted and replaced with the following:
 - "ESSENTIALLY TOXIC TRANSFER FLUID. Soil, waste, or gray water; and any fluid that is not an essentially nontoxic transfer fluid under this code."
- (8) In IPC, Section 202, the following definition is added: "High Hazard. See Contamination."
- (9) In IPC, Section 202, the following definition is added: "Low Hazard. See Pollution."
- (10) In IPC, Section 202, the following definition is added: "Motor Vehicle Waste Disposal Well. An injection well that discharges to the subsurface by way of a floor drain, septic system, French drain, dry well, or similar system that receives or has received fluid from a facility engaged in

vehicular repair or maintenance activities, including an auto body repair shop, automotive repair shop, new and used car dealership, specialty repair shop, or any other facility that does any vehicular repair work. A motor vehicle waste disposal well is subject to rulemaking under Section 19-5-104 regarding underground injection."

- (11) In IPC, Section 202, the following definition is added: "Pollution (Low Hazard). An impairment of the quality of the potable water to a degree that does not create a hazard to the public health but that does adversely and unreasonably affect the aesthetic qualities of such potable water for domestic use."
- (12) In IPC, Section 202, the definition for "Potable Water" is deleted and replaced with the following: "Potable Water. Water free from impurities present in amounts sufficient to cause disease or harmful physiological effects and conforming to the Utah Code, Title 19, Chapter 4, Safe Drinking Water Act, and Title 19, Chapter 5, Water Quality Act, and the regulations of the public health authority having jurisdiction."

Amended by Chapter 20, 2019 General Session

15A-3-303 Amendments to Chapter 3 of IPC.

(1) In IPC, Section 303.4, the following exception is added:

"Exception: Third-party certification for backflow prevention assemblies will consist of any combination of two certifications, laboratory or field. Acceptable third party laboratory certifying agencies are ASSE, IAPMO, and USC-FCCCHR. USC-FCCCHR currently provides the only field testing of backflow protection assemblies. Also see www.drinkingwater.utah.gov and Division of Drinking Water Rule, Utah Administrative Code, R309-105-12(4)."

- (2) IPC, Section 311.1, is deleted.
- (3) In IPC, Section 312.3, the following is added at the end of the paragraph:

"Where water is not available at the construction site or where freezing conditions limit the use of water on the construction site, plastic drainage and vent pipe may be permitted to be tested with air. The following procedures shall be followed:

- 1. Contractor shall recognize that plastic is extremely brittle at lower temperatures and can explode, causing serious injury or death.
- Contractor assumes all liability for injury or death to persons or damage to property or for claims for labor and/or material arising from any alleged failure of the system during testing with air or compressed gasses.
- Proper personal protective equipment, including safety eyewear and protective headgear, should be worn by all individuals in any area where an air or gas test is being conducted.
- Contractor shall take all precautions necessary to limit the pressure within the plastic piping.
- 5. No drain and vent system shall be pressurized in excess of 6 psi as measured by accurate gauges graduated to no more than three times the test pressure.
- The pressure gauge shall be monitored during the test period, which should not exceed 15 minutes.
- 7. At the conclusion of the test, the system shall be depressurized gradually, all trapped air or

gases should be vented, and test balls and plugs should be removed with caution."

(4) In IPC, Section 312.5, the following is added at the end of the paragraph:

"Where water is not available at the construction site or where freezing conditions limit the use of water on the construction site, plastic water pipes may be permitted to be tested with air. The following procedures shall be followed:

- 1. Contractor shall recognize that plastic is extremely brittle at lower temperatures and can explode, causing serious injury or death.
- Contractor assumes all liability for injury or death to persons or damage to property or for claims for labor and/or material arising from any alleged failure of the system during testing with air or compressed gasses.
- Proper personal protective equipment, including safety eyewear and protective headgear, should be worn by all individuals in any area where an air or gas test is being conducted.
- 4. Contractor shall take all precautions necessary to limit the pressure within the plastic piping.
- 5. Water supply systems shall be pressure tested to a minimum of 50 psi but not more than 80 psi as measured by accurate gauges graduated to no more than three times the test pressure.
- The pressure gauge shall be monitored during the test period, which should not exceed 15 minutes.
- 7. At the conclusion of the test, the system shall be depressurized gradually, all trapped air or gases should be vented, and test balls and plugs should be removed with caution."
- (5) A new IPC, Section 312.10.2, is added as follows: "312.10.2 Testing. Reduced pressure principle, double check, pressure vacuum breaker, reduced pressure detector fire protection, double check detector fire protection, and spill-resistant vacuum breaker backflow preventer assemblies shall be tested at the time of installation, immediately after repairs or relocation and at least annually. The Utah Cross Connection Control Commission has adopted the field test procedures published by the Manual of Cross-Connection Control, Tenth Edition. This manual is published by the University of Southern California's Foundation for Cross-Connection Control and Hydraulic Research. Test gauges shall comply with ASSE 1064."
- (5) A new IPC, Section 312.10.3, is added as follows: "312.10.3 Tester Qualifications. Testing shall be performed by a Utah Certified Backflow Preventer Assembly Tester in accordance with Utah Administrative Code, R309-305." Amended by Chapter 20, 2019 General Session

15A-3-304 Amendments to Chapter 4 of IPC.

- (1) In IPC, Table 403.1, the following changes are made:
 - (a) In row number "3", for in the field for "OTHER", a new footnote h is added.
 - (b) In row number "5", for "Adult day care and child day care" occupancy, in the field for "OTHER", a new footnote h is added.
 - (c) Footnote f is deleted and replaced with the following: "FOOTNOTE f: The required number and type of plumbing fixtures for outdoor public swimming pools shall be in accordance with Utah Administrative Code, R392-302 Design, Construction and Operation of Public Pools."
 - (d) A new footnote g is added as follows: "FOOTNOTE: g: When provided, in public toilet facilities, there shall be an equal number of diaper changing facilities in male toilet rooms and female toilet rooms. Diaper changing facilities shall meet the requirements of ASTM F2285-04 (2010) Standard Consumer Safety Performance Specifications for Diaper Changing Tables for

- Commercial Use."
- (e) A new footnote h is added to the table as follows: "FOOTNOTE h: Non-residential child care facilities shall comply with the additional sink requirements of Utah Administrative Code, R381-60-9, Hourly Child Care Centers, R381-70-9, Out of School Time Child Care Programs, and R381-100-9, Child Care Centers."
- (2) A new IPC, Section 406.3, is added as follows: "406.3 Automatic clothes washer safe pans. Safe pans, when installed under automatic clothes washers, shall be installed in accordance with Section 504.7."
- (3) A new IPC, Section 413.5, is added as follows: "413.5 Public toilet rooms. All public toiletrooms shall be equipped with at least one floor drain."
- (4) A new IPC, Section 413.6, is added as follows: "Prohibition of motor vehicle waste disposa wells. New and existing motor vehicle waste disposal wells are prohibited. A motor vehicle waste disposal well associated with a single family residence is not subject to this prohibition."
- (5) IPC, Section 423.3, is deleted. Amended by Chapter 441, 2020 General Session

15A-3-305 Amendments to Chapter 5 of IPC.

- (1) IPC, Section 502.4, is deleted and replaced with the following: "502.4 Seismic supports. Asa minimum requirement, water heaters shall be anchored or strapped to resist horizontal displacement caused by earthquake motion. Strapping shall be at points within the upper one third and lower one-third of the appliance's vertical dimensions."
- (2) In IPC, Section 504.6, a new number 15 is added as follows: "15. Be installed in accordance with the manufacturer's installation instructions, not to exceed 180 degrees in directional change."
- (3) In IPC, Section 504.7.2, the following is added at the end of the section: "When permitted by the code official, the pan drain may be directly connected to a soil stack, waste stack, or branch drain. The pan drain shall be individually trapped and vented as required in Section 907.1. The pan drain shall not be directly or indirectly connected to any vent. The trap shall be provided with a trap primer conforming to ASSE 1018 or ASSE 1044, a barrier type floor drain trap seal protection device meeting ASSE 1072, or a deep seal p-trap."
- (4) A new IPC, Section 504.7.3, is added as follows: "504.7.3 Pan Designation. A water heater pan shall be considered an emergency receptor designated to receive the discharge of water from the water heater only and shall not receive the discharge from any other fixtures, devises, or equipment."

Amended by Chapter 20, 2019 General Session

15A-3-306 Amendments to Chapter 6 of IPC.

- (1) IPC, Section 602.3, is deleted and replaced with the following: "602.3 Individual water supply. Where a potable public water supply is not available, individual sources of potable water supply shall be utilized provided that the source has been developed in accordance with Utah Code, Sections 73-3-1, 73-3-3, and 73-3-25, as administered by the Department of Natural Resources, Division of Water Rights. In addition, the quality of the water shall be approved by the local health department having jurisdiction. The source shall supply sufficient quantity of water to comply with the requirements of this chapter."
- (2) IPC, Sections 602.3.1, 602.3.2, 602.3.3, 602.3.4, 602.3.5, and 602.3.5.1, are deleted.

- (3) A new IPC, Section 604.4.1, is added as follows: "604.4.1 Manually operated metering faucets for food service establishments. Self closing or manually operated metering faucets shall provide a flow of water for at least 15 seconds without the need to reactivate the faucet."
- (4) IPC, Section 606.5, is deleted and replaced with the following: "606.5 Water pressure booster systems. Water pressure booster systems shall be provided as required by Section 606.5.1 through 606.5.11."
- (5) A new IPC, Section 606.5.11, is added as follows: "606.5.11 Prohibited installation. In no case shall a booster pump be allowed that will lower the pressure in the public main to less than the minimum water pressure specified in Utah Administrative Code R309-105-9."
- (6) In IPC, Section 608.1, the words "and pollution" are added after the word "contamination."(7) In IPC, Section 608.1, the following subsections are added as follows:
 - "608.1.1 General Installation Criteria.

An assembly shall not be installed more than five feet above the floor unless a permanent platform is installed. The assembly owner, where necessary, shall provide devices or structures to facilitate testing, repair, and maintenance and to insure the safety of the backflow technician.

608.1.2 Specific Installation Criteria.

608.1.2.1 Reduced Pressure Principle Blackflow Prevention Assembly.

A reduced pressure principle backflow prevention assembly shall be installed as follows:

- a. The assembly shall not be installed in a pit or below grade where the relief port could be submerged in water or where fumes could be present at the relief port discharge.
- b. The relief valve of the assembly shall not be directly connected to a waste disposal line, including a sanitary sewer, storm drain, or vent.
- c. The assembly shall be installed in a horizontal position, unless the assembly is listed or approved for vertical installation in accordance with Section 303.4.
- d. The bottom of each assembly shall be installed a minimum of 12 inches above the ground or the floor.
- e. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall be readily accessible for testing, repair, and maintenance.

608.1.2.2 Double Check Valve Backflow Prevention Assembly.

A double check valve backflow prevention assembly shall be installed as follows:

- a. The assembly shall be installed in a horizontal position unless the assembly is listed or approved for vertical installation.
- b. The bottom of the assembly shall be a minimum of 12 inches above the ground or the floor.
- c. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall be readily accessible for testing, repair, and maintenance.
- d. If installed in a pit, the assembly shall be installed with a minimum of 12 inches of clearance around all sides of the vault, including the floor and roof or ceiling, with adequate room for testing and maintenance.

608.1.2.3 Pressure Vacuum Breaker Assembly and Spill Resistant Pressure Vacuum Breaker Assembly.

A pressure vacuum breaker assembly and spill resistant pressure vacuum breaker assembly shall be installed as follows:

- a. The assembly shall not be installed in an area that could be subject to backpressure or back drainage conditions.
- b. The assembly shall be installed a minimum of 12 inches above all downstream piping and the highest point of use.
- C. The assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall be readily accessible for testing, repair, and maintenance.
- d. The assembly shall not be installed below ground or in a vault or pit.
- e. The assembly shall be installed in a vertical position."
- (8) In IPC, Section 608.3, the word "and" before the word "contamination" is deleted and replaced with a comma and the words " or pollution" are added after the word "contamination" in the first sentence.
- (9) In IPC, Section 608.6, the words "with the potential to create a condition of either contamination or pollution or" are added after the word "substances."
- (10) In IPC, Section 608.7, the following sentence is added at the end of the paragraph: "Any direct connection between potable water piping and sewer-connected waste shall be protected by an air gap in accordance with Section 608.14.1."
- (11) IPC, Section 608.8, is deleted and replaced with the following: "608.8 Stop and Waste Valves installed below grade. Combination stop-and-waste valves shall be permitted to be installed underground or below grade. Freeze proof yard hydrants that drain the riser into the ground are considered to be stop-and-waste valves and shall be permitted. A stop-and-waste valve shall be installed in accordance with a manufacturer's recommended installation instructions."
- IPC, Section 608.14.3, is deleted and replaced with the following: "608.14.3 Backflow preventer with intermediate atmospheric vent. Backflow preventers with intermediate atmospheric vents shall conform to ASSE 1012 or CSA CAN/CSA-B64.3. These devices shall be permitted to be installed on residential boilers, without chemical treatment, where subject to continuous pressure conditions, and humidifiers in accordance with Section 608.17.10. The relief opening shall discharge by air gap and shall be prevented from being submerged."
- (13) IPC, Section 608.14.4, is deleted.
- (14) IPC, Section 608.16.3, is deleted and replaced with the following: "608.16.3 Protection by a backflow preventer with intermediate atmospheric vent. Connections to residential boilers only, without chemical treatment, and humidifiers shall be protected by a backflow preventer with an intermediate atmospheric vent."
- (15) IPC, Section 608.16.4, is deleted and replaced with the following: "608.16.4 Protection by a vacuum breaker. Openings and outlets shall be protected by atmospheric-type or pressure type vacuum breakers. Vacuum breakers shall not be installed under exhaust hoods or similar locations that will contain toxic fumes or vapors. Fill valves shall be set in accordance with Section 425.3.1 415.3.1. Atmospheric Vacuum Breakers The critical level of the atmospheric vacuum breaker shall be set a minimum of 6 inches (152 mm) above the flood level rim of the fixture or device. Pipe-applied vacuum breakers shall be installed at the highest point, but not less than 6 inches (152 mm) above the flood level rim of the fixture, receptor, or device served. No valves shall be installed downstream of the atmospheric vacuum breaker. The atmospheric

vacuum breaker shall not be installed where it may be subjected to continuous pressure for more than 12 consecutive hours at any time. Pressure Vacuum Breaker - The critical level of the pressure vacuum breaker shall be set a minimum of 12 inches (304 mm) above the flood level of the fixture or device and above all downstream piping and the highest point of use."

- (16) In IPC, Section 608.16.4.2, the following is added after the first sentence: "Add-on-backflow prevention devices shall be non-removable. In climates where freezing temperatures occur, a listed self-draining frost proof hose bibb with an integral backflow preventer shall be used."
- (17) In IPC, Section 608.17.1.2, the words "or ASSE 1024" are deleted.
- (18) IPC, Section 608.17.2, is deleted and replaced as follows: "608.17.2 Connections to boilers. The potable supply to a boiler shall be protected by an air gap or a reduced pressure principle backflow preventer, complying with ASSE 1013, ASSE 1081.1, CSA B64.4 or AWWA C511.

Exception: The potable supply to a residential boiler without chemical treatment may be equipped with a backflow preventer with an intermediate atmospheric vent complying with ASSE 1012 or CSA CAN/CSA-B64.3."

- (19) In IPC, Section 608.17.4.1, a new exception is added as follows: "Exception: All class 1 and2 systems containing chemical additives consisting of strictly glycerine (C.P. or U.S.P. 96.5 percent grade) or propylene glycol shall be protected against backflow with a double check valve assembly. Such systems shall include written certification of the chemical additives at the time of original installation and service or maintenance."
- (20) IPC, Section 608.17.7, is deleted and replaced with the following: "608.17.7 Chemical dispensers. Where chemical dispensers connect to the water distribution system, the water supply system shall be protected against backflow in accordance with Section 608.14.1, Section 608.14.2, Section 608.14.5, Section 608.14.6 or Section 608.14.8. Installation shall be in accordance with Section 608.1.2. Chemical dispensers shall connect to a separate dedicated water supply line, and not a sink faucet."
- (21) IPC, Section 608.17.8, is deleted and replaced with the following: " 608.17.8 Portable cleaning equipment. Where the portable cleaning equipment connects to the water distribution system, the water supply system shall be protected against backflow in accordance with Section 608.14.1 or Section 608.14.2."
- (22) A new IPC, Section 608.17.11, is added as follows: "608.17.11 Automatic and coin operated car washes. The water supply to an automatic or coin operated car wash shall be protected in accordance with Section 608.14.1 or Section 608.14.2."
- (23) IPC, Section 608.18, is deleted and replaced with the following: "608.18 Protection of individual water supplies. See Section 602.3 for requirements." Amended by Chapter 20, 2019 General Session

15A-3-307 Amendments to Chapter 7 of IPC.

(1) IPC, Section 701.2, is deleted and replaced with the following: "701.2 Sewer required. Every building in which plumbing fixtures are installed and all premises having drainage piping shall be connected to a public sewer where the sewer is accessible and is within 300 feet of the property line in accordance with Utah Code, Section 10-8-38; or an approved private sewage disposal system in accordance with Utah

- Administrative Code, Rule R317-4, as administered by the Department of Environmental Quality, Division of Water Quality."
- (2) A new IPC Section 701.8 is added as follows: "701.8 Drainage piping in food service areas. Exposed soil or waste piping shall not be installed above any working, storage, or eating surfaces in food service establishments."
- (3) In IPC, Section 712.3.3.1, the following words are added after the word "PE": "stainless steel, cast iron, galvanized steel, brass,".

Amended by Chapter 20, 2019 General Session

15A-3-308 Amendments to Chapter 8 of IPC.

In IPC, Section 802.1.1, the last sentence is deleted. Amended by Chapter 249, 2016 General Session

15A-3-309 Amendments to Chapter 9 of IPC.

- (1) In IPC, Section 903.1.1, when the number of inches is to be specified, "12 inches (304.8mm)" is inserted.
- (2) In IPC, Section 903.67 the following sentence is added at the end of the paragraph: "Vents extending through the wall shall terminate not less than 12 inches from the wall with an elbow pointing downward."
- (3) In IPC, Section 905.4, the following sentence is added at the end of the paragraph: "Horizontal dry vents below the flood level rim shall be permitted for floor drain, floor sink, and bath tub installations when installed in accordance with Sections 702.2, 905.2 and 905.3 and provided with a wall clean out."

Amended by Chapter 297, 2013 General Session

15A-3-310 Amendments to Chapter 10 of IPC.

- (1) A new section 1002.4.1.6 is added as follows: "1002.4.1.6 Deep Seal Trap".
- [2] In IPC, Section 1003.3.8, the word "gravity" is inserted before the word "grease."

Amended by Chapter 20, 2019 General Session

15A-3-311 Amendments to Chapter 11 of IPC.

- A new IPC, Section 1106.1.1, is added as follows:
 "1106.1.1 Alternate Methods.
 An approved alternate storm drain sizing method may be allowed."
- IPC, Section 1109, is deleted.

Amended by Chapter 249, 2016 General Session

15A-3-312 Amendments to Chapter 12 of IPC.

IPC, Chapter 12, is not amended.

Enacted by Chapter 14, 2011 General Session

15A-3-313 Amendments to Chapter 13 of IPC.

(1) A new IPC, Section 1301.4.1, is added as follows: "1301.4.1 Recording.

The existence of a nonpotable water system shall be recorded on the deed of ownership for the property. The certificate of occupancy shall not be issued until the documentation for the recording required under this section is completed by the property owner."

(2) IPC, Section 1301.5, is deleted and replaced with the following: "1301.5 Potable water connections.

Where a potable water system is connected to a nonpotable water system, the potable water supply shall be protected against backflow by a reduced pressure backflow prevention assembly or an air gap installed in accordance with Section 608."

(3) A new section 1301.5.1 is added as follows: "1301.5.1

(3) IPC, Section 1301.9.4, is deleted and replaced with the following:

" 1301.9.4 Makeup water.

Where an uninterrupted supply is required for the intended application, potable or reclaimed water shall be provided as a source of makeup water for the storage tank. The makeup water supply shall be protected against backflow by a reduced pressure backflow prevention assembly or an air gap installed in accordance with Section 608. A full-open valve located on the makeup water supply line to the storage tank shall be provided. Inlets to the storage tank shall be controlled by fill valves or other automatic supply valves installed to prevent the tank from overflowing and to prevent the water level from dropping below a predetermined point. Where makeup water is provided, the water level shall not be permitted to drop below the source water inlet or the intake of any attached pump."

- (4) IPC, Section 1302.12.4, is deleted and replaced with the following: "1302.12.4 Inspection and testing of backflow prevention assemblies. Testing of a backflow preventer shall be conducted in accordance with Sections 312.10.1, 312.10.2, and 312.10.3."
- (5) IPC, Section 1303.15.6, is deleted and replaced with the following: "1303.15.6 Inspection and testing of backflow prevention assemblies. Testing of a backflow prevention assembly shall be conducted in accordance with Sections 312.10.1, 312.10.2, and 312.10.3."
- (6) IPC, Section 1304.4.2, is deleted and replaced with the following: "1304.4.2 Inspection and testing of backflow prevention assemblies. Testing of a backflow preventer or backwater valve shall be conducted in accordance with Sections 312.10.1, 312.10.2, and 312.10.3."

Amended by Chapter 441, 2020 General Session

15A-3-314 Amendments to Chapter 14 of IPC.

IPC, Chapter 14, is deleted and replaced with the following:

"1401. Subsurface Landscape Irrigation Systems.

Graywater recycling systems utilized for subsurface irrigation for single-family residences shall comply with the requirements of UAC R317-401, Graywater Systems. Graywater recycling systems utilized for subsurface irrigation for other occupancies shall comply with UAC R317-3, Design Requirements for Wastewater Collection, Treatment, and Disposal Systems, and UAC R317-4, Onsite Wastewater Systems."

Amended by Chapter 20, 2019 General Session

15A-3-315 Amendments to Chapter 15 of IPC.

In IPC, Chapter 15, the following reference standards are deleted: ASSE 5013-2015, ASSE 5015-2015. ASSE 5020-2015, ASSE 5047-2015, ASSE 5048-2015, ASSE 5052-98, ASSE 5056-2015, CSA B64.10-17, and CSA B64.10.1-17.

(2)In IPC, Chapter 15, the following referenced standard is added:

"Standard

Title

Referenced in code section number

reference

number

USC-FCCCHR

Foundation for Cross-Connection Control and Hydraulic Research

Table 608.1 Section 312.10.2"

10th Edition Manual of Cross

University of Southern California Kaprielian Hall 300 Los Angeles CA

Connection Control

90089-2531

Part 10

Statewide Amendments to International Swimming Pool and Spa Code

15A-3-1001 General provisions.

- (1) In ISPSC, Section 202, the following definition is added for private residential swimming pool: "PRIVATE RESIDENTIAL SWIMMING POOL. A swimming pool, spa pool, or wading pool used only by an individual, family, or living unit members and guests, but not serving any type of multiple unit housing complex of four or more living units."
- (2) In ISPSC, Section 320.1, the following changes are made:
 - (a) the words "or storm" are deleted;
 - (b) the words "onsite waste water" are added before the word "disposal"; and
 - (c) the words "or shall be disposed of by other means approved by the state or local authority" are deleted.

Enacted by Chapter 441, 2020 General Session